

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE  
PHILADELPHIA & READING RAILWAY NEAR LINFIELD, PA.,  
ON JULY 30, 1919.

August 23, 1919.

On July 30, 1919, there was a derailment of a passenger train on the Philadelphia & Reading Railway near Linfield, Pa., which resulted in the death of 2 employees and the injury of 1 employee and 9 passengers. After investigation of this accident, the Chief of the Bureau of Safety reports as follows:

The accident occurred on the district between Philadelphia and Reading, at a point where the line is 4-tracked. The two inner tracks are Nos. 1 and 2 and are known as the high-speed tracks, while the outer tracks are Nos. 3 and 4 and known as the low-speed tracks. The accident occurred on track No. 1. Train movements are governed by time-table, train orders and an automatic block signal system.

Beginning at a point opposite Linfield tower and proceeding southward, the track is straight for approximately 1,000 feet, verging into a compound curve approximately 4,100 feet long, the curvature of which ranges from 1 degree 30 minutes to 4 degrees 9 minutes. The accident occurred at the south end of this compound curve at which point the curvature of the track is 4 degrees 3 minutes, with an elevation of 8 inches.

The track is laid with 100-pound open-hearth steel rails, placed in the track in 1915; there are 18 first-class white oak ties under each rail, laid on a ballast of crushed stone about 2 feet in depth. Double-spiked tie plates are

used on each tie and the rails are equipped with anti-rail creepers, 4 or 5 being used to each rail.

Southbound passenger train No. 82 is a first class train running daily from Pottsville, Pa., to Philadelphia, Pa. On the day of the accident this train consisted of locomotive 352, 1 combination car, 2 coaches, 2 Pullman parlor cars and 1 coach, in the order named, all of the cars being of all-steel construction. The train, in charge of Conductor Huff and Engineer Laiby, left Reading at 8.31 or 8.32 a.m., 6 or 7 minutes late; it passed Linfield, 24.4 miles south of Reading, still 6 or 7 minutes late, and at 10.08 a.m., while running at a speed estimated to have been 30 or 35 miles an hour, was derailed at a point 5,100 feet south of Linfield tower.

After derailling, the train ran a distance of approximately 550 feet before the engine turned over, the track for this distance being badly torn up. When the train came to a stop, the engine, tender and combination car were turned over on their left sides. The rest of the train remained upright, but with the exception of the rear truck of the rear car the entire train was derailed. No rails were broken by the derailling, but many were so badly twisted and bent that they were rendered unfit for further service and 15 rails were used in repairing track No. 1, while 3 rails were used in repairing track No. 2. The two employees killed in the accident were the engineer and fireman.

Conductor Huff of train No. 82 stated that the air brakes on the train were tested before leaving Reading on the

day of the accident and were found to be working in good condition. He stated that the train left Reading 7 minutes late, due to connections at Reading, and proceeded on its way at schedule speed, being approximately 6 minutes late passing Linfield. He did not notice any application of the brakes before the accident occurred, his first intimation of anything wrong being the crash. He thought the speed at the time of the accident was 50 or 55 miles an hour, the usual speed at this point. He expressed no opinion as to the cause of the accident.

The statements of Brakeman Gray, Flagman Berger and Baggage-master Rickson were practically the same in substance as the statements of Conductor Huff.

Track Supervisor McEvoy stated that shortly after the accident occurred, he made a thorough inspection of the track and found that, with the exception of the portion torn up by the derailment, it was in good condition as to gauge, line and surface. He was of the opinion that something might have fallen on the rail and caused the derailment, and upon looking about, he found a piece of steel which bore evidence of wheels having passed over it and which might have fallen from the train. He stated further that he frequently passes over this track on fast trains and has always found it in good riding condition. He also has occasionally interviewed engineers running fast trains over this road as to whether or not they found any bad spots in the track and none have reported any bad spots in this vicinity. He stated that the section foreman in charge

of this section of track while serving in that capacity has always been considered thoroughly competent.

Division Engineer Kinsie stated that Track Walker Terpolilli walked over this track 20 minutes before the accident occurred and reported the track in good condition at that time; there were no trains over track No. 1 between the time of his examination and the time of the accident. Judging from the conditions and circumstances, it was the opinion of Division Engineer Kinsie that the wheels of the tender were the first to leave the rails.

General Locomotive Inspector Beck stated that locomotive 253 was regularly assigned to this run, that the locomotive was inspected before leaving Pottsville on the morning of the accident and found to be in first-class condition.

Superintendent of Motive Power Sanders stated that Engineer Leiby had been a road foreman of engines on the Philadelphia & Reading Railway for a number of years, that he was personally acquainted with him and considered him one of his best and most careful engineers.

Representatives of the Commission's Bureau of Safety were present and saw the inspection of locomotive 253 after the derailment and found by personal observation that there was no defect visible in either the engine or tender which could have caused the accident. The driving wheels had recently been turned and disclosed no wear; the flanges on all wheels were in good condition, and after the accident the brake rigging was found to be intact. The Commission's representatives

5.

also made a very close and thorough inspection of the track at and on both sides of the point of accident, finding it in first class condition and well maintained.

The cause of this accident is unknown; it is believed that the tender trucks were the first derailed, for some unknown cause, and forced the driving wheels of the engine to climb the high side of the track on the curve.

At the time of the accident the engine crew of train No. 22 had been on duty 1 hour and 35 minutes after a period off duty of 13 hours and 5 minutes.

DHL